

CITY OF MANCHESTER HIGHWAY DEPARTMENT

Standard Operating Procedures

**Ice & Snow Control
2008-2009**



**This procedures manual addresses the control of snow
and ice for over 459 miles of City streets and alleys
and the removal of snow from the Downtown area.**

**Kevin A. Sheppard, P.E.
Public Works Director**

Revised – 11/08

CITY OF MANCHESTER

Snow Removal & Ice Control Policy

GENERAL

Winter weather in Manchester is difficult to predict. There are many variables affecting winter operations such as type of precipitation, air and pavement temperature, traffic, wind, time of day and day of week. Winter operations is considered an art, not a science.

The City of Manchester, Public Works Department's snow removal and ice control policy has been based for many years on the goal of obtaining bare and dry pavements at the earliest practical time following cessation of a storm. It is impossible to provide bare pavement during a winter storm and the Public Works Department does not attempt to do so. Judgment based on experience is essential in conducting and timing remedial work to overcome ice and snow hazards. Whereas each storm situation varies, it is important to emphasize that this policy be used as a guideline to assist the Department in making well informed, judgment decisions in the exercise of the snow removal and ice control responsibilities. The Public Works Director recognizes that a rigid application of this policy is impossible given the varying conditions that exist in each storm. No single policy could be prepared that would dictate a set procedure for all types of weather events. Weather Services and weather radar are utilized in an effort to prepare for the onset of a weather event. At various locations, across the City's 459 miles of roadways depths of snow may vary.

Snow and ice control is to be normally performed by the Street Construction and Street Maintenance Sections of the Street Operations Division. Any additional manpower requirements will be drawn from the Refuse and Sewer Divisions by classification and seniority. In severe storm situations, administrative and engineering personnel may also be called upon to perform Snow and Ice control operations. All snow and/or ice control events are considered an emergency situation for the Public Works Department. As a result, all Department employees are obligated to make themselves available for these operations on an "as needed basis" in conformance with the Standard Operating Procedures and the Master Agreement.

Daily traffic volume and seasonal traffic are factors in determining the level of winter maintenance service with road grade also being an important factor. The Emergency Snow Routes and heavily travelled streets are maintained in such a manner that bare pavement is produced as soon as practical after termination of a storm.

It is impractical to develop specific rules on winter maintenance operations due to the numerous variables involved in various winter storms. The judgment of the Public Works Director, his deputy or the Chief of Highway Operations governs the type, quantities and application schedule of materials used to control snow and ice. The Chief of Highway Operations has *complete control* over all labor and equipment during a storm event accountable only to the Public Works Director or his Deputy. It is the intent of the Public Works Department to use the minimum deicing or anti-icing material needed to restore safe travel conditions as soon as practical following termination of winter storms.

The Department has three main operations to control ice and snow on City streets. These operations are:

1. Sanding & Salting,
2. Snowplowing and
3. Snow Removal

Salting and sanding units are usually equipped with calibrated mechanical spreaders that accurately control the application rates of materials. Employees are instructed in the proper dispensing of the necessary quantity at the appropriate time.

City streets are divided into two basic road types:

Primary - are streets which lead into and out of the City, industrial and commercial areas, routes which lead to the Airport, hospitals, malls, schools and provide crosstown movements.

Secondary - are streets which serve the residential areas of the City.

These designations have been determined by traffic volume primarily but have been modified to include highway grade, truck volume, accessibility to hospitals and emergency services, special events, second and/or third shifts at major industrial complexes and major commercial traffic generators.

Towing of vehicles is an operation which involves interdepartmental cooperation between Police and the Department of Public Works. When snowstorms of plowable depths are forecast, snow emergencies are declared which prohibit parking on City streets. Any vehicle which impedes plowing operations is removed from the street and towed to the City's Vehicle Impoundment Areas. Vehicles removed from the streets on the West Side, will be stored at the rear of the West Side Arena and vehicles removed from the east side streets will be stored in Derryfield Park off Bridge Street.

Whereas Manchester is a relatively large urban area encompassing some 33.9 square miles there are numerous sidewalks which must be cleared of snow and treated for ice. The City has a small fleet of 8 sidewalk tractors which address some 137 miles of City sidewalks.

Priorities are the Central Business District, school routes, bridges and other major arteries and then secondary roads. These routes are plowed and salted as soon as possible after the termination of the storm. The area adjacent to City Hall, stairs and crosswalks in the Downtown Area are maintained by utilizing survey personnel during and after the storm. Sidewalk maintenance must continue during melting and freezing cycles which can cause icy conditions.

Snow removal is an integral part of the City's snow removal and ice control policy. Snow when it falls in excess of 4 inches in a single storm or accumulates as a result of several smaller storms, may be removed from the Central Business District, the Commercial Street area and areas around the Civic Arena. When and as time permits when large amounts of snow accumulate in the center of the City's 130+ cul-de-sacs, snow is removed from these areas.

OPERATIONS

Snow removal and ice control usually requires the timely application of either chemicals, abrasives or a chemical-abrasive mixture to roadway surfaces in combination with aggressive snowplowing operations. Choice of material is dependent upon the weather and road conditions. Occasionally, conditions such as low temperatures do not require material application. Materials available include the following:

Sodium Chloride – The use of sodium chloride (common salt) combined with snowplowing is the most effective, most economical and safest snow and ice control method currently available. Salt is most effective for melting purposes at temperatures above 20 degrees F., with reduced melting ability as the temperature drops. In general, the purpose of salt is to **(1)** reduce adherence of snow to the pavement, **(2)** keep the snow in a “mealy” condition and thereby permit nearly full removal by plowing, and **(3)** prevent the formation of ice or snow ice (hard pack). Salt is not intended to take the place of snowplows. It is economically and environmentally unacceptable to attempt to melt snow accumulations that are plowable. Salt is also to be added to sand stockpiles to prevent freeze up of the abrasives. The Department’s Salt Storage Shed can accommodate up to 2000 tons with 1000 to 1200 additional tons stored at the Drop-Off Facility.

Calcium Chloride – Calcium chloride is a chemical which melts ice at lower temperatures than sodium chloride. Flake calcium chloride is used as an additive to abrasives (sands) to prevent freezing in stockpiles, to thaw culverts and catch basins, to help hold the abrasive in place on the pavement and on rare occasions, to trigger sodium chloride action. Liquid calcium chloride at 32% strength can be used to pre-wet solid sodium chloride to trigger the chemical reaction at low temperatures. The addition of liquid calcium chloride also is beneficial in retaining de-icing material on the roadway by increasing the adhesion of the material to the roadway. There are typically 6 tons of calcium chloride stored in one of the Department’s sheds in 50 lb. bags and an additional 2500 gallons of liquid calcium.

Abrasives – Abrasives (sand and fine mineral aggregates) are used primarily for immediate traction on hills, curves, intersections, railroad crossings and other areas to increase traction and minimize the use of salt. Sodium chloride, calcium chloride or an appropriate mixture of the two are usually added to abrasives in amounts dependent upon existing weather conditions. Stockpiles of abrasives are usually treated with sodium chloride at the start of the season to prevent subsequent freezing. The Department usually stores some 1200 tons of treated sand at the Department.

B. Storm Warning Service

The Highway Department subscribes to forecasting services by Meteorlogix Corporation of Lexington, MA. and Hometown Forecast Services of Nashua, NH. These services notify the Department of approaching storms and provides information on the storms’ characteristics. The information is provided by faxing. This information is made available to other departments from the Dispatcher’s Office as necessary. The Department has Meteorlogix weather computer which is utilized to help anticipate beginning of and end of events as well as monitor the intensity as depicted by the color radar.

C. Snow Emergency

During the winter, parking is permitted on only one side of City streets between November 15th and May 15th between 1:00 AM and 6:00 AM as stated in the "Alternate Parking Ordinance". Exhibit "C" provides information on the alternate side parking within the City of Manchester.

Based on the forecasts, local T.V. and the Meteorlogix' information, the Public Works Director or his Chief of Highway Operations may call a "Snow Emergency". The "Snow Emergency" is usually called with *at least* six (6) hours notice [we try for 10 to 12 hrs.] and is broadcast over local radio and T.V. stations and is e-mailed to residents who have asked to be added electronically. The calling of a "Snow Emergency" results in prohibition of parking on *any* and ALL City streets.

When the accumulation of snow during the winter season is such that the travel width of roadway is reduced to a point which, in the opinion of the Public Works Director is unsafe; he can require that parking be limited to one side only. [24 hrs. a day] Where parking on any side of a particular street is presently prohibited, the prohibition against parking shall continue to be in force. If parking presently exists on *both* sides, parking would be permitted on the odd numbered side of the street and prohibited on the even numbered side of the street. Parking will be restricted by posting the areas with "NO PARKING" signs and the bagging of parking meters noting the parking restriction.

D. Communications/Public Information

At 6:00 AM, the Chief or Assistant Chief of Highway Operations will make a determination whether or not to call the switchboard operator in for 6:30 AM to assist with complaints and communications. All communications from the public concerning snow conditions and problems are received at the Highway Department, 227 Maple Street, telephone number (603) 624-6444. This telephone is operational at all times during a major storm. When a problem or a request for service is received, it is relayed to the "Operations Room" where four phones are available at all times. The request is written on a message slip in duplicate, indicating the nature of the complaint, location, route number, date, time and who received the request. All slips are sorted by routes in order for the Superintendent to assign them to the proper piece of equipment.

When the Director of Public Works has declared a Snow Emergency, the Mayor, Police Chief, Fire Chief, Ambulance Service, the Union Leader, local radio and television stations; (WFEA, WGIR, WZID, WOKQ, WMLL, WMUR-TV Chn 9, and WNDS, Chn 50) will be notified in order to keep the public informed.

As ice and snow operations continue, other Departments and news media will be periodically updated as to Department activities. All communications between the Department's Operations Center and field force, are made from the Department's Base Station.

The Base Station is located in the Dispatcher's Office, which abuts the "Operations Room". This Base Station operates on a "trunk system" with other City agencies at 855.4875, 855.7125, 855.7375, 855.9625, 855.9875, 856.2125, 856.4875, 857.4875, 858.4875, 859.4875 as well as 860.4875 M.H. – UHF and has WPDK-444 as its call letters. In addition, most of the Department's snow removal equipment is equipped with radios having five channels. Channels #1 and #2, is the Base Station Channels and are the channels used for snowplowing operations. Channel #3, is the Drop-Off Center, Channel #4 is the Emergency Channel, Channel #5 is used by the Treatment Plant and Channel #6 is used by the Supervisors.

E. Control Center

All ice and snow activities performed by the Department, are coordinated out of the "Operations Room" at the Highway Department. The Public Works Director and/or Chief or Assistant Chief of Highway Operations will be present or in communication with the "Operations Room" at all times to control activities. The progression of a storm can be monitored on the Department's Meteorlogix color radar system which enables us to estimate the start and end of a storm or if there is a lull in the precipitation.

F. Personnel Call-In Procedures

In the Fall of the year, the Chief of Highway Operations prepares an up-to-date list of all Department employees by classification and seniority. When personnel are needed for snow control activities, they are called in by classification, seniority and scheduled turn to work. Whereas this is an *emergency* situation, employees are expected to report for work in a timely manner and should notify the person calling them in if they expect to be delayed or approximately how long before they will be able to report in. If an employee is unable to work or refuses to work, this information is noted in the "Call-In List".

G. Equipment Rental (Based on Bid Prices)

Depending on equipment availability at the Highway Department to control and remove snow from City streets, it may be necessary to rent equipment. This equipment could include trucks with plows, trucks for hauling snow, front end loaders, graders and salters. (See Exhibit "D" for list of trucks contract company for hauling snow.)

II. **SANDING & SALTING – 28 ROUTES (See Exhibit "E")**

If a major storm is not predicted, the Dispatcher can call-in employees to man up to *three [3] salters and a loader* to be sent out to address localized problems or complaints. The Dispatcher notifies the Chief or Asst. Chief of Highway Operations as soon as snow or ice begins falling. Based on storm warnings received from the Department's Weather Service and news media, salters are loaded and all plows are mounted for a salting/plowing operation. All plows will be fueled and ready for the predicted snowstorm. If the storm strikes at night, the Dispatcher notifies the Chief or Asst. Chief of Highway Operations as soon as snow or ice begins falling. The Chief or Asst. Chief of Highway Operations based on conditions, notifies the Dispatcher to contact the Garage Superintendent and to begin calling in the salting crews. The salting crews consist of the following equipment and personnel:

<u>No.#</u>	<u>Title</u>	<u>Grade</u>	<u>Equipment</u>
1	Chief or Asst. Chief of Hwy. Operations	G-24	Car
1	Hwy. Field Supervisor	G-20	Pick-Up Truck
1	Loader Operator	G-14	Front End Loader
*52	Truck Drivers & Wingmen	G-13	Trucks w/Salters
6	Operators		Pick-Up Truck w/ Salters & Plows
1	(Complete) Garage Shift		(Repair & Maintenance Work)

*Includes 28 Drivers & 24 Wingmen

The Chief or Asst. Chief of Highway Operations coordinates all operations and spot checks street conditions. Each salter is assigned to one of the twenty-seven routes including sub-routes as shown on Exhibit "E". [Main arteries are given first priority]

III SNOWPLOWING – (Exhibit "F" & "G")

- A. The Public Works Director and the Chief or Asst. Chief of Highway Operations based on deteriorating weather conditions and weather reports, will order the salting operations changed over to a plowing operation. The Dispatcher at this time, will call in the remaining snowplowing personnel from the "Call-In List", as explained in Section I (H). While the Department is changing into a plowing operation, the Public Works Director is examining conditions in order to determine whether or not to call a "Snow Emergency" (if one has not already been called) which would prohibit parking on **all** streets.
- B. The snowplowing/removal operations are organized as shown on Exhibit "F". As seen from this organization chart, the Chief of Highway Operations is responsible to the Public Works Director for all activities in connection with snowplowing/snow removal. The Garage and Highway Superintendent and his staff, assist the Chief of Highway Operations in his snow removal operations.

The City of Manchester is divided into seven snowfighting zones as shown on Exhibit "G". Each zone is assigned to a "Zone Supervisor" who is responsible to the Chief of Highway Operations for conditions in his area. These seven zones are further divided into 27 routes (areas) which have certain pieces of equipment assigned to each route. In addition to these 27 routes, there is a piece of equipment assigned to the one-way streets on the east side of the City; six one ton trucks with salters to alleys; and two road graders assigned to four lane major arterials such as Elm St., Queen City Avenue, South Willow St., etc. Equipment will only be taken out of an assigned route if absolutely necessary and only under the orders of the Chief of Highway Operations. If a plow completes its plowing operations prior to the end of a shift, the equipment will return to a sanding/salting operation after notifying the Chief of Highway Operations. Five of the six operators who man the Department's one-ton pick-up trucks are supervisors and are responsible for checking the routes in their assigned areas.

The Chief of Highway Operations prior to leaving after the initial snowplowing operations, will prepare a procedure to be followed in continuing snow control operations. Included with the procedure will be a list of equipment and personnel available to the Asst. Chief of Street Operations.

This individual will be responsible to insure that the Chief of Highway Operations' instructions are carried out. If conditions change requiring a different course of action, the Chief of Highway Operations will be notified immediately, in order to obtain additional instructions.

Sidewalk plowing is the responsibility of the Highway Supervisor. Major walkways are kept open with eight sidewalk tractors, all have plows but four can be equipped with 50" snowblowers and a fifth with a 70" snowblower at the Supervisor's discretion. The Downtown Area sidewalks are brick, therefore requiring the use of calcium as part of the snow and ice control. One of the tractors is equipped with a rubber blade which is used exclusively on the brick sidewalks downtown.

The Garage/Maintenance staff (during snow control operations), works on two shifts of 12 hours each in order to provide 24-hour service. Their function is to keep the Department's equipment in service and on the road at all times. When necessary, their staff is supplemented with personnel from the other operating divisions. The Maintenance Superintendent will keep a record of all equipment breakdowns, the type of breakdown and the operator's name.

- C. All snowfighting activities are coordinated from the "Operations Room" located at the Highway Department abutting the Dispatcher's Office. This room is staffed by the Chief or Asst. Chief of Highway Operations. **NO** personnel will be in the "Operations Room" unless on business and with the approval of the Chief of Highway Operations.

The City is divided into five zones for towing including the "Inner City" area. Each zone will have a Police Officer accompanied by a Highway person with a two-way radio to keep in contact with the plow truck in their zone and to coordinate which areas will be towed first.

The Police Officer coordinates all required towing activities and dispatches the cars to be towed to a towing official at the City's Impoundment Areas where the tow trucks are stationed.

Communication is maintained at all times between the "Operations Room" and the field equipment by radio. City equipment has radios on the same frequency as the Department's Base Station. Any equipment without radios are equipped with portable walkie-talkies.

- D. Street and sidewalk operations require approximately eighty-seven (87) Department personnel not including the Garage Staff. The personnel and equipment needed is shown on Exhibit "G", the Organization Chart. This eighty-seven (87) personnel contingent consists of supervisory personnel, equipment operators, truck drivers and wingmen.

IV. SNOW REMOVAL OPERATIONS

A. General:

Snow removal operations usually are performed after the storm has ended and during normal working hours whenever feasible. Snow removal consists of five separate operations coordinated from the "Operations Room".

- [1] Snow removal in the Downtown Area. (See Exhibit "K")
Elm Street the night *after* the storm.
- [2] Snow removal from parking lots under Department control (around municipal buildings), City Hall.
- [3] Snow removal from dead-ends and intersections.
- [4] Stairs and sidewalks in various locations throughout the City and in front of the four [4] elderly high rises [AS TIME PERMITS],
- [5] As time permits, if conditions warrant.

OPTIONAL SNOW REMOVAL OPERATIONS:

Snow removal in the Downtown Area (see Exhibit "K"). When operations begin at Elm Street, the streets around the Verizon Arena; Commercial Street, Hanover Street, Bridge Street, Concord Street, Amherst Street, Merrimack Street and Central Street (to Chestnut St.) and Chestnut Street in the vicinity of the Court House, Market Street by City Hall and Stark Street are picked up.

Snow which is removed under the above conditions is disposed of by means of a portable snow melter. The snow is loaded into the hopper and discharged into the nearest manhole. As snow removal operations get closer to the snow melter, some snow is trucked to our old landfill site. Rented equipment can be made available if plowing operations are continuing. **No snow will be picked up at turnarounds on the night of the storm.**

A. Downtown

1. Snow is removed from the following Downtown Areas after each storm:

The night of the storm

- Around City Hall
- Two Police Station Parking lots and the ramp to the Central Fire Station.

The day of the storm

- Bridges, their walkways and stairs.
- School sidewalks (pick-up areas).
- Handicapped access ramps in the Downtown Areas.

The night **after** the storm (if necessary)

- Elm Street – Auburn to Pearl Street [possibly Harrison] and some sidestreets if time permits and conditions warrant. If conditions warrant, snow will be removed from the streets around the Civic Center on a second night as well as from the Commercial Street area.

2. When snow accumulates and as directed by the Public Works Director, snow is removed from the following locations:

Second night [when required]

- a) Commercial Street and streets east of Elm Street as shown on Exhibit "H" (Bridge St., Pine St., Chestnut St., etc.)
- b) Narrow streets around West High School.
- c) Narrow streets around Central High School.
- d) Streets west of Elm Street as shown on Exhibit "H" (Stark St., Market St., W. Merrimack St., W. Central St., Franklin St., Middle St., etc.)
- e) Kelley Street and narrow streets off Kelley Street.
- f) Canal Street – Auburn Street to the Amoskeag Bridge.
- g) Elderly high rises (4).

Exhibit "G" denotes the personnel and equipment required to remove snow from the Downtown Area.

C. Parking Lots

The Department is responsible for removing snow from several parking lots at various City buildings. These lots are located at City Hall Annex, Police, Fire and Health Departments. The equipment and personnel required to perform this work is also noted on Exhibit "G".

D. Dead-Ends (As time permits)

The Department has two crews which remove snow out of dead-end streets and large intersections. This operation consists of removing piles of snow which accumulates at the ends of streets and in large intersections due to snowplowing operations. The snow is removed to provide safe access and movement to traffic. Each crew consists of two to three trucks including a front end loader, as noted on Exhibit "G".

E. Sidewalks

Snow removal operations performed by the Sidewalk Crew and Survey personnel consists of removing snow off the following:

- All brick sidewalks in the Downtown Area
- Public stairs and walkways.
- Bridge sidewalks.
- Crosswalks of major intersections.
- The sidewalks around the (4) elderly high-rise complexes.

F. As Time Permits/if Conditions Warrant:

Snow is removed from:

1. Elm Street – north of Bridge Street.
2. Streets around public buildings.

NOTE: *The exact order or number of times these snow removal operations will be performed, **will depend** on the nature of frequency and intensity of the storm(s) and condition(s) following each storm.*

V. **SEVERE EMERGENCY CONDITIONS**

A) **General**

1. A *severe* emergency situation would be defined as an unusually intense storm developing great depths of snow or a series of heavy storms in a short period of time or personnel problems such as a strike and/or walkout during a snowstorm. Any of the above conditions has the potential of crippling the City.
2. The Public Works Director would have a "Special" Snow Emergency" in effect, with recommendations to the news media that all but emergency vehicles be kept off City streets.

B) Severe Storm Emergency

1. When it becomes apparent that an unusually severe storm condition is developing, the Public Works Director and the Chief of Highway Operations can direct that all available rental equipment be engaged and all available equipment from other Departments can be expected to provide the listed equipment for snow removal on an emergency basis:

Parks/Cemetery Dept: Four 3-ton Dump Trucks,
Two Loaders (Provided that schools
don't have to be picked up.)

Water Works: Two Dump Trucks,
One Loader.

In addition, during a *severe* snow emergency, the Public Works Director would ask the Mayor to assign all City equipment to his jurisdiction until the emergency has passed. The main objective of all personnel and equipment during the early stages of this severe condition, would be open and keep open all main routes throughout the City until the storm subsides enough to open the remaining streets.

C) Severe Personnel Emergency Condition

1. If Department personnel strike or walk out during a storm, the Public Works Director and Chief of Highway Operations will immediately engage all available rental equipment. This rental equipment along with whatever City equipment that could be manned, would be instructed to open and keep open all main routes throughout the City, until the remaining streets could be addressed.
2. If the Public Works Director feels that the Department can no longer control conditions with the personnel and equipment available as described above, he will recommend to the Mayor, that an appeal be made to the State for assistance from the National Guard and to the private sector, for additional equipment capable of controlling conditions.

TOWING

The City is divided into five [5] zones for towing including the "Inner City" area [Canal Street to Union Street; Valley Street to Bridge St.]. Each zone will have a Department employee who accompanies a Police Officer in a cruiser. The Officer in charge and the Department employee in charge of towing operations ride together and are responsible for the "Inner City" area. The employee maintains communication with the plow equipment in his zone by means of two-way radios and coordinates which areas are to be towed first. The Police Officer is in constant communication with a towing official at the City Impoundment Area where the tow trucks are stationed. Occasionally, a *sixth* area is made up from the five primary areas. Additional Police Officers are used on a limited basis to ticket vehicles in areas we will not get to.

When the plow operator calls in an area [to the Zone Coordinator] in which vehicles impede his operation, the Police Officer has tow trucks dispatched to the area. The Officer and the Department's Zone Coordinator stand-by while the vehicles are being towed in order to ensure that there are no incidents.

Towing operations are initially concentrated in the "Inner City" area, the one-ways and areas where streets are narrow; the streets around West High School, Central High School, Corey Square and areas where major apartment complexes exist. Discretion is exercised in the Central Business Area and towing usually doesn't occur until the end of the business day.

SNOW REMOVAL EXHIBITS

Exhibit "A"	Meteorlogix
Exhibit "A"	Meterologix FAX
Exhibit "A"	Hometown Weather
Exhibit "B"	Conditions
Exhibit "C"	Alternate & Snow Emergency Parking
Exhibit "D"	Rental Equipment
Exhibit "E"	Salting/Equipment Map
Exhibit "F"	Organization
Exhibit "G"	Plowing Routes Map
Exhibit "H"	Downtown Area Map
Exhibit "I"	Priority Routes
Exhibit "J"	Engr./Admn. Call-In List
Exhibit "K"	Elm St. Downtown Snow Removal
Exhibit "L"	Sand Barrel Locations

Kevin A. Sheppard, P.E.
Public Works Director

Timothy J. Clougherty
Deputy Public Works Director



Commission
William A. Varkas
Henry R. Bourgeois
Joan Flurey
William F. Houghton Jr.
Robert R. Rivard

CITY OF MANCHESTER

Highway Department

Public Information Notice

11/1/08

The City of Manchester's overnight winter on-street odd/even parking ordinance will go into effect on **November 15th 2008** and will run through to **May 15th 2009**.

Where parking is normally allowed on a street, the Ordinance permits vehicles to be parked only on the odd numbered side of a street on odd numbered calendar days, and only on the even numbered side of a street on even numbered calendar days beginning *after* 1:00 AM and until 6:00 AM in the morning. **This means that when you park your car in the evening of an odd-numbered day, it should be parked on the even side of the street, because it will be an even day as of 1:00 AM.** If parking is presently allowed on only one side of the street during the day, then parking will be permitted on that side of the street every night. *NO overnight parking will be permitted on the circular portion of dead end cul-de-sacs!* Those in violation of this Ordinance, will be subject to a \$25.00 fine. The exception is a "Pilot Program Area" bounded by Canal Street on the west, Elm Street on the east, Pleasant Street on the south and Mechanic Street on the north.

All vehicles must be removed from City streets upon the declaration of a Snow Emergency by the Public Works Director or his authorized agent. Parking is permitted in the Victory Parking Garage between 10:00 PM and 6:00 AM during snow emergencies. Any vehicle parked in violation of a Snow Emergency Declaration, will be removed and impounded. Vehicles which are so impounded, will be stored at the City's Vehicle Impoundment Areas. Vehicles removed from the streets on the west side, will be stored at the rear of the West Side Arena and vehicles removed from the east side streets will be stored in Derryfield Park off Bridge Street. In order to recover an impounded vehicle, the owner will be required to present proof of ownership and to make payment of \$110.00 in cash, certified check or money order, payable to the City of Manchester. This must be done within 24 hours of the time when the vehicle was towed. Vehicles not recovered within 24 hours, will be subject to additional storage charges.

Kevin A. Sheppard, P.E.
Public Works Director

(Revised Traffic Ordinance)

FORECAST FOR MANCHESTER, NH

ISSUED AT: 5:01AM EST WED 12 NOV 08

NEXT FORECAST AT: 12:00PM EST WED 12 NOV 08

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NEXT 24 HOURS

TIME	TYPE OF PRECIPITATION	PROB	SNOW in/hr	CLDS	WIND D/S/G	AIR TMP
6am	none	0%	0	clear	NW 3	29
7am	none	0%	0	clear	NW 3	29
8am	none	0%	0	clear	NW 4	32
9am	none	0%	0	clear	NW 5	36
10am	none	0%	0	clear	NW 5	40
11am	none	0%	0	clear	NW 5	42
12pm	none	0%	0	clear	W 6	45
1pm	none	0%	0	clear	W 6	47
2pm	none	0%	0	pcl dy	W 6	47
3pm	none	0%	0	pcl dy	W 5	48
4pm	none	0%	0	pcl dy	SW 4	47
5pm	none	0%	0	pcl dy	SW 4	44
6pm	none	0%	0	clear	LV	42
7pm	none	0%	0	clear	LV	39
8pm	none	0%	0	clear	LV	37
9pm	none	0%	0	clear	LV	36
10pm	none	0%	0	clear	LV	35
11pm	none	0%	0	clear	LV	34
12am	none	0%	0	clear	LV	34
1am	none	0%	0	clear	LV	33
2am	none	0%	0	pcl dy	LV	33
3am	none	0%	0	pcl dy	LV	31
4am	none	0%	0	pcl dy	LV	31
5am	none	0%	0	mcl dy	LV	30

Next 24-hour low: 29 at 6am

Next 24-hour high: 48 at 3pm

PRECIPITATION AMOUNT

Precip chance: 0%

Liquid: 0.00"

Snow: 0"

Snow type:

PRECIPITATION TIMING

Beginning at:

Ending at:

Total duration of

precipitation:

Exhibit "A"

Town of Manchester
Attention: Kevin Sheppard
Fax: 603-624-6487

Hometown Forecast Services
Nashua, NH
Phone: 1 603 881 3082

Forecast prepared: Saturday,
November 15, 2008

Fax 1 603 459-0317

Meteorologist: Mike DiPlatzi

Forecast Discussion

DEVELOPING LOW PRESSURE WILL MOVE UP THE APPALACHIANS SATURDAY... SWINGING A COLD FRONT ACROSS NEW ENGLAND LATE SATURDAY NIGHT AND SUNDAY MORNING. RAIN SHOULD TAPER OFF TO SCATTERED SHOWERS IN THE AFTERNOON BEFORE MORE WIDESPREAD SHOWERS MOVE BACK IN AT NIGHT. COLDER UNSEASONABLE TEMPERATURES WILL MOVE IN SUNDAY AND MONDAY. A REINFORCING SHOT OF COLDER AIR TUESDAY MAY HELP PROMOTE SCATTERED SNOW SHOWERS. UNSEASONABLY COLD AIR WILL CONTINUE THE REST OF THE WEEK.. Forecast prepared: 1:30 AM. Sunrise: 6:35 AM. Sunset: 4:28 PM.

Postmortem: Friday was cloudy and damp

Saturday, Nov 15	Conditions	Temperature	Wind	Gusts	Precipitation
12 AM - 3 AM	Fog/misty	51	SE 10		T
3 AM - 6 AM	Fog/misty	51	SE 10-15		T
6 AM - 9 AM	Showers	52	SE 10-15		01-03
9 AM - 12 PM	Rain	56	SE 10-15		10-20
12 PM - 3 PM	Rain	60	S 10-15		05-15
3 PM - 6 PM	Showers possible	62	S 10-15	25	t-02
6 PM - 9 PM	Showers possible	60	S 10-15	25	t-05
9 PM - 12 AM	Rain	58	S 15-20	25	10-20

Forecast Comments:Rain tapering off to scattered showers in the afternoon

Daily Maximum
Temperature: 62

Daily Minimum
Temperature: 50-55

Sunday, Nov 16	Conditions	Temperature	Wind	Gusts	Precipitation
12 AM - 3 AM	Rain/showers	55	SW 15-25		.05-.15
3 AM - 6 AM	Showers	52	SW 15-25		05-10
6 AM - 9 AM	Maybe a shower?	51	W 15-25		T-02
9 AM - 12 PM	Cloudy	51	W 10-20	25-30	

12 PM - 3 PM	Clouds/sun	50	W 15-20	25-30	
3 PM - 6 PM	Clouds/sun	49	W 15-20	25-30	
6 PM - 9 PM	Partly cloudy	44	W 15-20	25-30	
9 PM - 12 AM	Partly cloudy	40	W 10		

Forecast Comments: Clouds and some sun. Windy and cooler.

Daily Maximum
Temperature: 55

Daily Minimum
Temperature: 40

Monday, Nov 17	Conditions	Temperature	Wind	Gusts	Precipitation
12 AM - 3 AM	Cloudy	33	W 10		
3 AM - 6 AM	Cloudy	30	W 10		
6 AM - 9 AM	Cloudy	29	W 10		
9 AM - 12 PM	Cloudy	37	W 10		
12 PM - 3 PM	Cloudy	44	W 10		
3 PM - 6 PM	Cloudy	44	W 10		
6 PM - 9 PM	Cloudy	37	W 10		
9 PM - 12 AM	Cloudy	35	W 10		

Forecast Comments: Cloudy

Daily Maximum
Temperature: 45

Daily Minimum
Temperature: 29

Tuesday, Nov 18

Forecast Comments: Clouds and sun. Breezy.

Daily Maximum
Temperature: 38

Daily Minimum
Temperature: 24

Wednesday, Nov 19

Forecast Comments: Sunny

Daily Maximum
Temperature: 37

Daily Minimum
Temperature: 23

LongRangeOutlook:

For next week, a trough in the eastern US will keep our temperatures cool. As it looks right now, any precipitation events should be light as the position of the trough axis should keep any ocean systems east of the area. There is a chance of a storm system affecting the area for next weekend.

SNOW & ICE STORM CONTROL

City of Manchester

CONDITION #1

Temperature
Near 30
Precipitation
Snow, sleet or freezing
rain,
Wet

If snow or sleet, apply salt 500 – 600 lbs. per two-lane mile. If snow accumulates over three inches, begin plowing and repeat salting after storm ceases. If freezing rain, apply salt at 600 lbs. per two-lane mile.

CONDITION #2

Temperature
Below 30 or falling,
Precipitation
Snow, sleet or freezing
rain,
Road surface,
Wet or sticky

Apply salt at 300 – 600 lbs. per two-lane mile and calcium chloride, depending on accumulation over three inches, begin plowing and repeat salting after storm ceases. If freezing rain, apply salt at 300 – 600 lbs. per two-lane mile. Liquid calcium is added at a rate of between $\frac{3}{4}$ of a gallon per minute and 2.2 gallons per minute depending on the routes and the speed at which the route is being driven. Liquid calcium is applied to all major roads, bridges and hills.

CONDITION #3

Temperature
Below 20 and falling,
Precipitation
Dry snow,
Road surface
Dry

If Meteorlogix predicts any accumulation of snow, apply salt at 300 to 600 lbs. per two lane miles and plow as soon as possible. Continue to plow and patrol to check for wet, packed or icy spots; treat them with heavy salt applications. Liquid calcium is added at a rate of between $\frac{3}{4}$ of a gallon per minute and 2.2 gallons per minute, depending on the routes and the speed at which the route is being driven. Liquid calcium is applied to all major roads, bridges and hills.

CONDITION #4

Temperature
Below 20
Precipitation
Snow, sleet or freezing
rain,
Road surface
Wet

Apply salt at 600 – 800 lbs. per two-lane mile as required. If snow accumulates over three inches, begin plowing and repeat salting after storm ceases. If temperature starts to rise, apply salt at 500 – 800 lbs. per two-lane mile, wait for salt to react before plowing. Continue until safe pavement is obtained. Liquid calcium is added at a rate of between $\frac{3}{4}$ of a gallon per minute and 2.2 gallons per minute depending on the routes and the speed at which the route is being driven. Liquid calcium is applied to all major roads, bridges and hills.

CONDITION #5

Temperature
Below 10
Precipitation
Snow or freezing rain,
Road surface
Accumulation of packed
Snow or Ice.

Apply salt at rate of 800 lbs. per two-lane mile or salt treated abrasives at rate of 1500 to 2000 lbs. per two-lane miles, if snow or ice becomes mealy or slushy, plow. Repeat application and plow as necessary. Liquid calcium is added at a rate of between $\frac{3}{4}$ of a gallon per minute and 2.2 gallons per minute depending on the routes and the speed at which the route is being driven. Liquid calcium is applied to all major roads, bridges and hills.

Note: *The Chief or Asst. Chief of Highway Operations depending on actual conditions, may adjust rate of application depending on how the area treated reacts.*

Note: *The light 300 lb. application called for in Conditions #1 and #2, must be repeated often for the duration of the condition.*

2008 SNOW REMOVAL/RENTAL EQUIPMENT

TJB INC.

Phone: 627-8519 [Laura] – [24 Hr. answering service]

SALTING – 11/08-'09

<u>Truck No.#</u>	<u>ROUTE</u>	
T-586	<u>Rte. 1</u>	Webster St. north – Elm to River Road. McCarthy St. northerly.
T-604	<u>Rte. 2</u>	Webster St. north – Elm to D.W. Highway
T-621	<u>Rte. 3</u>	Bicentennial Drive south. Union St. to Daniel Webster Highway.
T-582	<u>Rte. 4</u>	Webster St. north – D.W. Highway east to Mammoth Road.
T-540	<u>Rte. 5</u>	Webster St. south to Bridge St. Maple St. to Mammoth Rd.
T-541	<u>Rte. 6</u>	Webster St. south to Bridge St. Elm St. to Maple St.
T-543	<u>Rte. 7</u>	Bridge St. to Lake Ave. – Elm St. to Mammoth Rd.
T-538	<u>Rte. 8</u>	Lake Ave. to Somerville St. Wilson St. to Mammoth Rd.
T-608	<u>Rte. 9</u>	Lake Ave. to Somerville St. Wilson St. to Elm St., Jewett south to Cilley Rd., west to Willow St.
T-537	<u>Rte. 10</u>	Somerville St. to Weston Rd. West of So. Willow St. to Jewett St.
T-619	<u>Rte. 11</u>	Somerville St. south. Jewett St. to Mammoth Rd. [BOTH sides of Huse Rd.]
T-628	<u>Rte. 12</u>	Wellington Rd. Area – Mammoth Road easterly. I-293 to T/L.
T-622	<u>Rte. 13</u>	Bridge St. Extension to Hanover St. Mammoth Rd. to Rte. 293
T-595	<u>Rte. 14</u>	East of Rte. 293 – south to Proctor Road and Lake Shore Rd.
T-542	<u>Rte. 15</u>	Mammoth Rd. east – Candia Rd. to Medford St.

SALTING (Cont'd.)

<u>Truck No.#</u>	<u>ROUTE</u>	
T-583	<u>Rte. 16</u>	Mammoth Rd. east – Candia Rd. north to Hanover St.
T-637	<u>Rte. 17</u>	North of Island Pond Rd. – south and east of T/L.
T-620	<u>Rte. 18</u>	Elm St. to River – Auburn St. to Bennington Road.
T-609	<u>Rte. 19</u>	Gas St. BOTH sides of Elm St. south to Mitchell. Dunbar St. to RR east of Calef Rd.
T-625	<u>Rte. 20</u>	Armand St. south – BOTH sides of Beech St. to Rte. 293.
T-596	<u>Rte. 21</u>	Bow St. area southerly.
T-580	<u>Rte. 22</u>	City line northerly – Harvey Rd. west.
T-539	<u>Rte. 23</u>	Milford/Donald Sts. south to T/L – Merrimack River west.
T-535	<u>Rte. 24</u>	Milford/Donald Sts. north to Piscataquog River; So. Main St. to T/L.
T-603	<u>Rte. 25</u>	Winter St. north to Amory – Merrimack River to Piscataquog River.
T-536	<u>Rte. 26</u>	Amory Street northerly.
T-627	<u>Rte. 27</u>	Hackett Hill Road southerly.
T-544	<u>Rte. 28</u>	ONE-WAY Streets on EAST side.

Yard Loader T-93

Small 1-ton Trucks – (Alleys & narrow streets)

T-623	Bruce Gosselin	West Side
T-605	Tom Cronin	West Side
T-548	Phil Doyon	Downtown

SALTING (Cont'd.)

Small 1-ton Trucks

T-565	Bob Brule	Southeast
T-572	Shawn Maurice	West Side
T-573	Rick Robillard	South End

PLOWING #71 – 11/08

<u>Route #</u>	<u>Truck#</u>	<u>Driver</u>	<u>Helper</u>
#1	T-582	Orlando Farias	Chad Dalbec
#1	T-543	Scott Roberts	Dave Coutu
#2	G-19	George Croteau	-----
#2	T-628	Steve Walsh	Jack Gillis
#3	T-595	Bob Mouratidis	Paul Meservey
#4	T-627	Carl Gregoire	Nelson Barreiro
#5	T-622	Jay Lorenz	John Lugo
#6	T-82	Nate Nalley	-----
#7	T-538	Ed Emond	Corey Richards
#8	T-637	Bill Greenwood	Tim Grenier
#8	T-97	Paul Hargis	-----
#9	T-619	Ron Gagnon	Rick Leblanc
#10	T-85	Bill Dubois	-----
#11	T-83	Brian Stanley	-----
#12	T-541	Adam Naigle	Andrew Magoon
#13	T-608	Marc Montville	-----
#14	T-74	Dave Bernier	-----
#15	T-91	Scott L'Neureux	-----
#15	T-621	Roland Couture	Dick Angers
#16	T-586	Mike Dockx	Mike Woitkowski
#16	T-604	Dan Garrity	-----
#17	T-620	Tim Boisvert	Guy Cote
#18	T-609	A. Papachronopoulos	-----
#18	T-542	Steve Neuman	Dave Shaw
#19	T-537	John Clancy	Dimitrios Kostakis
#20	T-625	Tom Krideras	Rick Philibert
#21	T-580	Tom Perreault	Brian Ricker
#21	T-596	Mike Michon	John McCarthy
#21	T-540	Mark Taylor	Tom Moran
#22	T-84	Paul Faustini	-----
#23	T-539	Shawn Dionne	Rick Schmidtchen
#24	T-535	Jim Doherty	John Bardelcik
#25	T-64	Bob Bernard	-----
#25	T-603	Roger Lafond	-----
#26	T-536	Chris Belanger	Kyle Poisson
#27	T-583	Yves Goulet	Andrew Magoon
One Ways	T-544	Tim Whitteker	Jon Labore
Yard	T-93	Don Paris (Jim Zinis)	
Downtown	G-20	Jim Zinis	-----
Downtown	G-21	Bill Provencher	-----
	T-623	Bruce Gosselin	North End
	T-605	Tom Cronin	West Side
	T-548	Phil Doyon	Downtown
	T-565	Bob Brule	Southeast
	T-572	Shawn Dionne	West Side
	T-573	Rick Robillard	South End

Parking Lots

T-78

Nate Nalley

City Hall, Police Parking Lots

SNOW REMOVAL EQUIPMENT – '08/'09

<u>EQUIPMENT</u>	<u>ROUTE</u>
T-582	1
T-543	1
G-19	2
T-628	2
T-595	3
T-583	4
T-622	5
T-82	6
T-538	7
T-637	8
T-97	8
T-619	9
T-85	10
T-83	11
T-541	12
T-608	13
T-74	14
T-91	15
T-621	15
T-586	16
T-604	16
T-620	17
T-609	18
T-542	18
T-537	19
T-625	20
T-580	21
T-596	21
T-540	21
T-84	22
T-539	23
T-535	24
T-603	25
T-64	25
T-536	26
T-627	27
T-544	One Ways
T-548	Downtown Backs/East Side Backs
T-572	West Side Backs
T-623	North End
T-605	West Side
T-573	South End
T-565	East Side Backs
G-20	Special
G-21	Special

3 Graders
8 Loaders
34 Trucks (6 on backstreets & circles)

Revised – 11/'08

SUPERVISORS

Snow Removal (Downtown)

C-4	Zone 1	--	Brian Fitzpatrick
C-5	Zone 2	--	Bob Neveu
T-550	Zone 3	--	Dave Lawrence
C-6	Zone 4	--	Ed Desrosiers
"Operations Room"			Robert Roy/Bill Croteau

Towing Operation

West Side	--	Leah Gore and (1) Police Officer with Car.
West Side	--	Brad Moore and (1) Police Officer with Car.
Downtown	--	Janet Frye (1) Police Officer with Car.
North End	--	Ben Martineau and (1) Police Officer with Car Zone 4.
South End	--	Denis Compagna and (1) Police Officer with Car.
"Inner City" Area	--	Officer in charge with Car.

Sidewalk Plowing**Assistant in Charge:** Tom GillSPARES

[Snowblower]

T-79 Tom Moran
 T-80 Jeffrey Freitas
 T-81 Bill Greenwood
 T-86(B) Tim Whittaker
 T-87(B) Tom Krideras
 T-90(B) Ed Emonds
 T-92(B) Norm Paris
 T-96(B) John Clancy

Adam Naigle
 Scott Roberts
 Marc Montville
 Dave Bernier
 Rick White

- (3) Units plow all night
 (2) Units come in at 3:00 AM for Downtown sidewalks.

Elm Street Sidewalks (Downtown Cleaning)**See Exhibit "K"****Foreman:** Tom Gill

T- Raul Vasquez
 T- Steve Warren
 T- John Meisel
 T-92(B) Norm Paris

BACK-UP PERSONNEL

(Plowing & Salting)

Grader: Jim Zinis,
Dave Lawrence,
Dave Cross,
Guy Cote,
Bill Provencher

Loader: Dan Garrity,
Jay Lorenz,
Dave Bernier,
Yves Goulet

Driver: Gene Coburn,
John Meisel,
Gregory Bond

Helper: Steve Warren,
Denis Compagna,
Michelle Duhaime,
Ben Martineau,
Janet Frye,
Leah Gore,
Raul Vasquez,
Brad Moore

Revised – 11/08

SNOW ROUTES

- Route 1 D.W. Hwy. to Hooksett Line to Old Mammoth Road.
Mammoth Rd. to Kennard Rd. to Smyth Rd. to
Blodget St. @ Linden to Webster to Maple.
(T-582 double wing w/salter)
(T-543 wing w/salter)
- Route 2 Hooksett T/L to Auburn T/L to 101 (293) to 93 to
Bridge St. (Wellington Rd.) to Mammoth Rd. to
Hooksett T/L.
(G-19; T-628 Wing w/salter)
- Route 3 I-293 & 93 to Candia Rd. @ Proctor Rd. to Lake
Shore to Island Pond Road to Auburn T/L to 101(293)
to 293.
(T-595 w/Salter)
- Route 4 293 & 93 @ Hanover St. to Salisbury to Amherst to
Mammoth Road to Candia Road to 293 & 93.
(T-583 wing w/Salter)
- Route 5 Mammoth @ Wellington Road to 93 South to Hanover
St. to Mammoth Road.
(T-622 w/Salter)
- Route 6 Candia Road south to Island Pond Road. Mammoth
Road east to East Industrial Park area.
(T-82 w/Wing & Salter)
- Route 7 Somerville St. north to Lake Avenue; Mammoth Road
west to Wilson Street includes Rogers Street.
(T-538 w/Wing & Salter)
- Route 8 From south of Island Pond Road to Londonderry T/L –
Harvey Road to Auburn T/L (includes Sheffield Road
& Pratt Court).
(T-637 w/double Wing & Salter) & (T-97 w/wing)
- Route 9 Somerville St. south to So.Willow @ Huse Road;
Mammoth Road to Jewett to Weston Rd. to South
Willow.
(T-619 w/Wing & Salter)
- Route 10 Lake Ave. north to Bridge St.; Mammoth Road to
Wilson to Hanover west to Maple St.
(T-85 Loader w/Wing)
- Route 11 Bridge Street north to Smyth Road/Kennard Road
Mammoth Rd. to Oak St. at Blodget St.
(T-83 Loader w/Wing)

SNOW ROUTES

- Route 12 Elm Street to Oak at Blodget east to Linden.
Hanover St. to Webster St.
(T-541 w/Wing & Salter)
- Route 13 Hayward St. to Cilley Rd. – Taylor St. to Elm Street.
(T-608 w/Salter)
- Route 14 Union to Elm; Webster north to north of Robie Street.
(T-74 Loader w/Wing)
- Route 15 Hooksett T/L to Union Street; River Road to Daniel
Webster Highway.
(T-91 Loader w/Wing) & (T-621 w/double Wing & Salter)
- Route 16 Union St. @ River Road south to Robie Street, westerly to
Elm south to W. Webster St. to the river then north to north
of Coral Avenue.
(T-586 Loader w/Wing)
(T-604 Plow w/Salter)
- Route 17 Elm St. west to the River; W. Webster to south of South
Commercial Street.
(T-620 w/Wing & Salter)
- Route 18 Elm St. easterly to Wilson St.: Hanover St. southerly to
Hayward St. and west of Elm St. to the River – Hayward
St. south to Wyoming/O'Malley Streets.
(T-609 double wing w/Salter)
(T-542 Wing w/Salter)
- Route 19 Somerville St. @ Jewett St. south to Weston Road to So.
Willow St. to John E. Devine Dr. to B&M RR – north to
Queen City Ave. extension. East along Cilley Road to
Taylor Street, north to Somerville, east to Jewett St.
(T-537 w/Wing & Salter)
- Route 20 B&M RR west to Calef Road; Gold Street northerly to
Queen City Avenue extension.
(T-625 w/Wing & Salter)
- Route 21 I-293 south to the Townlines; S.Willow St./Harvey Road to
the River. Also, Huse Road easterly (behind the Mall).
(T-596 Double Wing w/Salter)
(T-580 w/Wing & Salter) & (T-540 Wing w/Salter)
- Route 22 O'Malley St./Wyoming St. southerly to Gold Street –
Calef Road westerly to River.
(T-84)

SNOW ROUTES

- Route 23** Piscataquog River to South Main St. to Milford/Donald Sts.
southerly to the T/L, Merrimack River westerly to the T/L.
(T-539 w/Wing & Salter)
- Route 24** Piscataquog River southerly to south of Donald/Milford Sts.
South Main St. to T/L.
(T-535 w/Wing & Salter)
- Route 25** Piscataquog River northerly to West Bridge St., westerly
along Amory Street to the Piscataquog River.
(T-64 Loader w/Wing)
(T-603 Plow/Salter)
- Route 26** Amory Street northerly to Goffstown Road; Merrimack River to
T/L (includes West Side Arena).
(T-536 w/Wing & Salter)
- Route 27** Goffstown Road from Merrimack River +/- to south of Joseph
Street, northerly to the T/L.
(T-627 Double Wing w/Salter)
- ONE WAYS** (T-544 Double Wing w/Salter)

Revised – 11/08

PRIORITY ROUTES

Priority Routes are main roadways which must be kept passable at all times to insure emergency access and to permit vehicular movement in and out of the City. These roads which are highlighted on your route maps should be salted and plowed first and these operations repeated again prior to morning rush hours (6:00 AM to 8:00 AM) and again prior to the evening rush hours (3:30 PM to 6:00 PM).

Consideration should also be given to other priority locations in your route such as schools, public buildings, hospitals and schools should be resalted and replowed, if necessary (5:00 PM to 6:00 AM).

STREET PRIORITIES

Salmon Street
North Street
Mammoth Road
South Willow Street
Harvey Road
Perimeter Road
Candia Road
Wellington Road
Hanover Street
Bridge Street
Goffs Falls Road
Mast Road
Kelley Street
Goffstown Road
Dunbarton Road
(5) Bridges
Campbell Street
Arah Street
Gold Street
Spring Garden
Alpheus Street
Brown Ave./Hazelton
Calef Road
Amory Street
Kimball (Amory-Bremer)
Bremer Street
Coolidge Ave.(Kelley-Amory)
Island Pond Road
Country Club Drive
Edward J. Roy Drive
Jobin Drive
Head Street

Main Street
Somerville Street
Queen City Avenue
Lake Avenue
Eddy Road
Front Street
Boynton Street
Milford Street
Donald Street
Sylvester Street
Varney (Main-Mast)
Spruce Street
Beech Hill Drive
Beech Hill Avenue
Bradley Street
Ahern Street
West Baker Street
O'Malley Street
Trahan Street
South Main Street
West Hancock Street
Woodbury Street
Rockland Avenue
Granite Street
McGregor Street
Putnam Street
Straw Road
Cohas Avenue
Vinton Street
Hackett Hill Road
Amoskeag Street
Pinard Street

Massabesic Street
E. Industrial Pk. Drive
South Porter Street
Weston Road
Jewett Street
Bodwell Road
Valley Street
Pine Street
Chestnut Street
Hamel Drive
Huse Road
Mooresville Road
Smyth Road
Webster Street
Tarrytown Road
Cypress (Valley-Lake)
Cilley Road
Maple Street
Beech Street
Elm Street
South Beech Street
D.W. Highway
Union Street
River Road
Canal Street
Second Street
Montgomery Street
Page Street
John E. Devine Drive
March Avenue
Kennard Road
Commercial Street

PRIORITY Snow Routes

<u>Main Routes</u>	<u>Distance/Feet</u>	<u>Distance/Miles</u>
Mammoth Rd./S.Mammoth Rd.	31,800'	6.02 Mi.
Union Street	22,200'	4.21 Mi.
Elm St./So.Elm St.	21,250'	4.03 Mi.
Beech St./So. Beech St.	20,600'	3.90 Mi.
Brown Ave./Hazelton Ave.	19,500'	3.69 Mi.
Bridge St./Bridge St. Extn.	18,500'	3.50 Mi.
River Road	15,150'	2.87 Mi.
Hanover Street	15,000'	2.84 Mi.
Maple/So.Maple St.	14,500'	2.75 Mi.
Candia Road	14,000'	2.65 Mi.
Bodwell Road	14,000'	2.65 Mi.
Wellington Road	12,000'	2.27 Mi.
South Willow Street	11,700'	2.22 Mi.
Pine Street	11,450'	2.17 Mi.
Island Pond Road	10,000'	1.89 Mi.
Dunbarton Road	10,000'	1.89 Mi.
Huse Road	9,000'	1.71 Mi.
Goffstown Road	9,000'	1.71 Mi.
Lake Avenue	9,000'	1.71 Mi.
Cohas Avenue	8,700'	1.65 Mi.
Perimeter Road	8,500'	1.61 Mi.
Cilley Road	8,000'	1.52 Mi.
Goffs Falls Road	8,000'	1.52 Mi.
Chestnut Street	7,850'	1.49 Mi.
Valley Street	7,500'	1.42 Mi.
Second Street	7,400'	1.40 Mi.
Calef Road	7,200'	1.36 Mi.
South Main Street	7,000'	1.33 Mi.
Gold Street	7,000'	1.33 Mi.
Somerville Street	7,000'	1.33 Mi.
Spruce Street	7,000'	1.33 Mi.
Webster/W.Webster Sts.	7,000'	1.33 Mi.
Canal Street	6,500'	1.23 Mi.
Jewett/S.Jewett St.	6,450'	1.22 Mi.
Commercial St.	6,311'	1.20 Mi.
E.Industrial Park Dr.	6,250'	1.18 Mi.
Kelley St.	5,500'	1.04 Mi.
Straw Road	5,500'	1.04 Mi.
Daniel Webster Highway	5,500'	1.04 Mi.
Harvey Road	5,000'	.95 Mi.
Boynnton Street	5,000'	.95 Mi.
Queen City Avenue	5,000'	.95 Mi.
Mast Road	5,000'	.95 Mi.
Bremer Street	5,000'	.95 Mi.
Smyth Road	5,000'	.95 Mi.
Amory Street	5,000'	.95 Mi.
Massabesic Street	5,000'	.95 Mi.
Weston Road	4,500'	.85 Mi.

PRIORITY Snow Routes

<u>Main Routes</u>	<u>Distance/Feet</u>	<u>Distance/Miles</u>
Page Street	4,000'	.76 Mi.
Country Club Drive	4,000'	.76 Mi.
Montgomery Street	4,000'	.76 Mi.
Vinton Street	3,850'	.73 Mi.
Putnam Street	3,500'	.66 Mi.
Eddy Road	3,500'	.66 Mi.
Granite Street	3,500'	.66 Mi.
Campbell Street	3,500'	.66 Mi.
Tarrytown Road	3,400'	.64 Mi.
South Porter St.	3,150'	.60 Mi.
Front Street	3,100'	.59 Mi.
John E. Devine Dr.	3,000'	.57 Mi.
Rockland Avenue	3,000'	.57 Mi.
Arah Street	3,000'	.57 Mi.
Milford Street	3,000'	.57 Mi.
Edward Roy Dr.	2,700'	.51 Mi.
Hackett Hill Road	2,600'	.49 Mi.
Salmon St. (Elm – Maple St.)	2,500'	.47 Mi.
Donald Street	2,500'	.47 Mi.
North Street (Elm – Maple St.)	2,500'	.47 Mi.
McGregor Street	2,400'	.46 Mi.
Main Street	2,400'	.46 Mi.
March Avenue	2,300'	.44 Mi.
Cypress Street (Valley – Lake)	2,100'	.40 Mi.
Jobin Drive	2,100'	.40 Mi.
Varney Street	2,000'	.38 Mi.
Amoskeag Street	2,000'	.38 Mi.
Mooresville Road	2,000'	.38 Mi.
Kennard Road	1,900'	.36 Mi.
Sylvester Street	1,500'	.28 Mi.
Woodbury Street	1,500'	.28 Mi.
Beech Hill Avenue	1,500'	.28 Mi.
Bradley Street	1,200'	.23 Mi.
Beech Hill Drive	1,200'	.23 Mi.
West Hancock St.	1,200'	.23 Mi.
Head Street	1,150'	.22 Mi.
Hamel Drive	1,050'	.20 Mi.
O'Malley Street	1,011'	.19 Mi.
West Baker Street	1,000'	.19 Mi.
Ahern Street	883'	.17 Mi.
Spring Garden Street	800'	.15 Mi.
West Salmon Street	800'	.15 Mi.
Trahan Street	741'	.14 Mi.
Coolidge Avenue (Amory – Kelley St.)	700'	.13 Mi.
Pinard Street	700'	.13 Mi.
Alpheus Street	600'	.11 Mi.
Kimball Street (Amory – Bremer)	550'	.10 Mi.

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ENGINEERING PERSONNEL

Snow Removal Call-In List

List is based on **Grade** and by **Seniority in grade**.

Commercial License

Dick Mack	G-19
John Meisel	G-15
Gene Coburn	G-17
Mike Michon	G-12

Operator's License

Dave Glance	G-17
Steve Warren	G-15
Raul Vasquez	G-17
Denis Compagna	G-18

To Be Called Only In *EXTREME* Emergencies!!!!

Peter Capano	G-21
Bruce Thomas	G-23

Operators can drive pick-ups & one ton trucks.

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List Based on *Grade* and by *Seniority* in Grade

ADMINISTRATION

"Gas" Call-In List

- o Michelle Duhaime,
- o Janet Frye

ADMINISTRATION

Payroll Call-In List

- o Daniel Lenski,
- o Sean Markey

ADMINISTRATION

"Wing Man" Call-In List

- o Michelle Duhaime,

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ADMINISTRATION

* Telephone Call-In List
2008 – '09

Name	Phone Number
Leah N. Gore	867-6708 [Cell]
Caroline Duval	668-1879 [Unlisted] 661-3771 [Cell]
Janet Frye	622-0754 759-2016
Tracy Boudreau	668-6013 785-8448
Michelle Duhaime	644-5624
Mindy Salomone-Abood	1(603)887-8142 759-1203
Bob Lynch [in emergencies <u>only</u>]	668-5838
Don Pinard [in emergencies <u>only</u>]	645-1205

* This is a list of qualified operators of the phone system.

Caroline Duval is to be called for recording
the complaints taken by the phone operator.
Phone: 668-1879 [Unlisted]

Caroline should always be called second or
if a Snow Emergency Notice needs to be
faxed out.

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ELM STREET *DOWNTOWN* SNOW REMOVAL

Mission

Remove snow from Elm Street between Auburn Street and Bridge Street, utilizing City personnel to remove the snow from the sidewalk areas and pile it in the center lane of Elm St. to be hauled away and melted. (*Priority areas would be between Bridge and Granite Streets.*)

Second night – remove snow from Elm St. – Valley to Manchester and streets in the vicinity of the Civic Center and the Commercial Street Area. Snow may be removed whenever 4 inches of snow falls or after several minor snowfalls resulting in an accumulation of snow of approximately 4 inches. The decision to remove snow after minor snowfalls will be made by the Public Works Director or the Chief of Highway Operations.

Snow removal operations on the City's 459 miles of public roadways remains the number one priority of the Highway Department. Removal of snow from the Downtown Area will only be performed when it will not affect on-going plowing operations or pending future forecasted plowing operations.

Equipment

(Departmental)	--	2 Bobcats 3 Graders 5 Front End Loaders 2 Snowblower 4 Ten Wheelers 1 Tractor Trailer 1 Snow Melter
(Rental) [if needed]	--	4 Tractor Trailers 2 Ten Wheelers

Personnel

Sidewalk Foreman:	Tom Gill
Laborer:	John Lugo
Laborer:	Raul Vasquez
Laborer:	Steve Warren
Bobcat Operator:	Mark Montville
Bobcat Operator:	Bill Dubois
Foreman:	Bruce Gosselin
Grader:	Jim Zinis
Grader:	George Croteau
Grader:	Bill Provencher
Front End Loader:	Don Gentes
Snowblower:	Paul Faustini
* Snowmelter:	Bob Brule
Snowmelter Assistant:	Ron Gagnon
Tractor Trailer Operator:	Don Compagna
(4) Ten Wheelers:	_____
(2) Laborers:	_____

* *Additional personnel may be utilized from the Engineering Section.*

* [NOTE: Snowmelter can operate for approximately 8 hrs. At that time, the melter would need to be refueled and the sump cleaned out. A sewer eductor and operator would be called in to assist in cleaning the hopper. The **BUYER** will have a supplier on notice for refueling.]

Procedure Elm Street should have snow removal operations completed prior to 7:00 AM due to the *new* lane configurations. Depending upon the snowfall, snow removal from sidewalk areas should begin no later than 7:00 PM and snow removal operations should begin around 10:00 PM (estimate for a 6" to 10" storm). A major storm may require personnel in earlier, possibly 4:00 PM. Private haulers should be available by midnight.

The electronic message boards noting snow removal operations should be set up north of Harrison and south of Auburn Streets with Bridge and Granite streets closed off with barriers so vehicles cannot access Elm Street. Posting of "No Parking" signs the afternoon **before** the snow removal operations begin, will be necessary. Towing may be required. Media participation is essential. Snowblowing shall begin no later than midnight and in the event of a major storm, 2 snowblowers are required. At approximately 5:00 AM, salt trucks should begin salting the snow removal area to ensure there are no icy patches.

IF a second storm is predicted within 24 hours, the scope of this operation may be reduced or limited to the areas of diagonal parking to ensure the men receive proper rest and vehicle maintenance can be achieved.

Other streets in the Downtown Area that would have a high priority for snow removal **after** Elm Street has been cleared on an "as time permits basis" are as follows:

- | | |
|------------------|------------------------------------|
| o Commercial St. | <i>Granite St. to Canal St.</i> |
| o Hanover St. | <i>Elm St. to Chestnut St.</i> |
| o Amherst St. | <i>Elm St. to Chestnut St.</i> |
| o Bridge St. | <i>Elm St. to Chestnut St.</i> |
| o Vine St. | <i>Concord St. to Amherst St.</i> |
| o Central St. | <i>Elm St. to Chestnut St.</i> |
| o Chestnut St. | <i>Merrimack St. to Auburn St.</i> |
| o Lowell St. | <i>Elm St. to Chestnut St.</i> |
| o Concord St. | <i>Elm St. to Chestnut St.</i> |
| o Manchester St. | <i>Elm St. to Chestnut St.</i> |
| o Merrimack St. | <i>Elm St. to Chestnut St.</i> |
| o Willow St. | |
| o W. Auburn St. | |
| o Depot St. | |

* In the area of the Civic Center, snow removal operations may be extended to Union Street.

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November '08
Southeast Side Circles To Be Picked-Up

1.	Carver Street	-	Off Cushing Ave.
2.	Holt Ave. Circle	-	Off Lovering St.
3.	Pine Brook Place	-	Off Island Pond Road
4.	Wedgewood Lane	-	Off Pine Brook Place
5.	Shaunna Court	-	Off Cohas Avenue
6.	Quail Court	-	Off Pheasant Lane
7.	Pheasant Lane	-	Off Bodwell Road
8.	Carl Drive	-	Off South Willow Street
9.	Brady Circle	-	Off South Mammoth Road
10.	Martel Drive	-	Off Mooresville Road
11.	Brad Court	-	Off Mooresville Road
12.	Janet Court	-	Off Mooresville Road
13.	Justin Place	-	Off Huse Road
14.	Ivywood Lane	-	Off Huse Road
15.	Kara Street	-	Off Weston Road
16.	Arch Street	-	Off Kara Street
17.	Cambridge Court	-	Off South Porter Street
18.	Fernand St. (1/2 Circle)	-	Off South Porter Street
19.	South Gray Court	-	Off Fernand Street
20.	Purdue St.	-	Off Porter Street
21.	Leewood Street	-	Off Cilley Road
22.	Woodgate Circle	-	Off Cilley Road
23.	Jobin Drive (1/2 Circle)	-	Off Jewett Street
24.	Memorial Drive	-	Off Gabrielle Street
25.	Elmwood Circle	-	Off Calef Road
26.	Lisa Lane	-	Off South Beech Street
27.	Bourne Street	-	Off South Beech Street
28.	Gem Drive	-	Off Kenburma Street
29.	Caye Lane	-	Off Gem Drive
30.	Devco Drive	-	Off Kenburma Street
31.	Mollie Drive	-	Off Goffs Falls Road
32.	Riverbank Road	-	Off Depot Road
33.	Cascade Circle	-	Off Brown Avenue
34.	Pamela Circle	-	Off "Old" Brown Avenue
35.	Priscilla Circle	-	Off Hazelton Court
36.	Calvert Circle	-	Off Landsdowne Street
37.	Surrey Lane	-	Off Brent Street
38.	Trolley Court	-	Off Trolley Street
39.	Hickory Circle	-	Off Trolley Street
40.	Sandy Brook St.	-	Off Ridgewood
41.	Wildwood Court	-	Off Brent Street
42.	Tamarack Court	-	Off Hickory Street
43.	Vandora Drive	-	Off Robert Hall Road
44.	Brent Court	-	Off Brent Street
45.	Pahray Lane	-	Off Cohas Avenue
46.	Rosewood Lane	-	Off Maynard Avenue
47.	Primrose	-	Off Bodwell Road
48.	Wild Indigo	-	Off Bodwell Road

November '08
Southeast Side Circles To Be Picked-Up

49.	Cobblestone Lane	-	Off Bodwell Road
50.	Garden Walk	-	Off Bodwell Road
51.	Megan Drive	-	Off Bodwell Road
52.	Karin Lane	-	Off Bodwell Road
53.	Ashley Drive	-	Off Mammoth Road
54.	Rambling Rosegate Rd.	-	Off Rosegate
55.	Rosegate Farm Drive	-	Off Corning Road
56.	Colin Drive	-	Off Harvey Road
57.	Flagstone	-	Off Proctor Road
58.	Green Meadow	-	Off Proctor Road
59.	Buckley Circle	-	Off E. Industrial Park Drive
60.	Lilac Court	-	Off Brown Avenue
61.	Newbury Road	-	Off Perimeter Road
62.	Bryant Road	-	Off Corning Road

November '08

Northeast Side Circles To Be Picked-Up

1.	West North Court	-	Off North Street
2.	Milne Drive	-	Off W. Webster Street
3.	McLane Lane	-	Off River Road
4.	Arthur Avenue	-	Off Coral Avenue
5.	Krysten Lane	-	Off Coral Avenue
6.	Chad Road	-	Off Bicentennial Drive
7.	Bayberry Lane	-	Off North Union Street
8.	Harold Street	-	Off Irwin Drive
9.	Morton Street	-	Off Irwin Drive
10.	Merrow Street	-	Off Irwin Drive
11.	Maryann Street	-	Off Irwin Drive
12.	Steinmetz Drive	-	Off North Union Street
13.	Whitford Street	-	Off North Union Street
14.	Apple Hill Court	-	Off Campbell Street
15.	Poplar Street	-	Off Campbell Street
16.	Crosbie Street	-	Off D.W. Highway
17.	Whig Drive	-	Off Oak Street
18.	Wagner Street	-	Off Webster Street
19.	Gerard Drive	-	Off Smyth Lane
20.	McIntyre Court	-	Off Mammoth Road
21.	Foxwood Court	-	Off "Old" Wellington Rd.
22.	Lavallee Lane	-	Off Wellington Road
23.	Lindstrom Lane	-	Off Wellington Road
24.	Lindstrom Court	-	Off Lindstrom Lane
25.	Fogg Court	-	Off Currier Drive
26.	Danforth Circle	-	Off Currier Drive
27.	Fleming Street	-	Off Bernsen Avenue
28.	Linda Lane	-	Off Wellington Road
29.	Highview Circle	-	Off Highview Terrace
30.	Alladin Street	-	Off Eastwind Drive
31.	Winward Lane	-	Off Alladin Street
32.	Wellington Court	-	Off "Old" Wellington Rd. (Bridge St. Extension)
33.	Ohio Avenue	-	Off Bridge St. Extension
34.	Christy Lane	-	Off Bridge St. Extension
35.	Tennyson Drive	-	
36.	Independence Lane	-	Off Alladin Street
37.	Constitution Lane	-	Off Alladin Street
38.	Congressional Lane	-	Off Alladin Street
39.	Whittington Street	-	Off Wellington Hill Rd.
40.	Radburn Street	-	Off Wellington Hill Rd.

November '08

Manchester Circles WEST

1.	Ann Avenue	-	Off South Main Street
2.	St. James Circle	-	Off Boynton Street
3.	Tanglewood Circle	-	Off Donald Street
4.	Janet Lee Court	-	Off William Street
5.	Nourie Park	-	Off Rockland Avenue
6.	Tondreau Court	-	Off Mast Road
7.	Ruta Circle	-	Off Greeley Street
8.	Kaunas Circle	-	Off Goffstown Road
9.	Durette Court	-	Off Dubuque Street
10.	Pasture Drive	-	Off Donald Street
11.	Prairie Court	-	Off Donald Street
12.	Duncan Farms Drive	-	Off Goffstown Road
13.	Legacy Drive	-	Off Goffstown Road
13.	Acorn Circle	-	Off Countryside Blvd.
14.	Pondview Lane	-	Off Countryside Blvd.
15.	Sylvan Lane	-	Off Countryside Blvd.
15.	Treetop Lane	-	Off Countryside Blvd.
16.	Streamside Drive	-	Off Countryside Blvd.
17.	Teaberry Place	-	Off Countryside Blvd.
18.	Blueberry Drive	-	Off Hackett Hill Rd.
19.	River Birch Circle	-	Off Hackett Hill Rd.
20.	White Pine Lane	-	Off Hackett Hill Rd.

SNOW/ICE CONTROL ACTIVITIES

Areas of Concern

* These locations should be checked and/or given *early* attention.

1. **Watson Street** (off Grove) dead-end gets missed.
2. **Perkins Ave.** (off Chase) dead-end. Have truck back in, push snow to side opposite the houses.
3. **Justin Place** (off Huse Road) cul-de-sac. Street gets missed!
4. Dead-ends off Mooresville Road.
5. Dead-ends off Gabrielle Street.
6. **Head Street** (off Varney St.)
7. **Riddle/Tilton Street** (off Varney St. to Milford St.) plowed late, plowed poorly. (Records should be kept when this area gets plowed, salted, etc.)
8. **Paquette Ave.** easterly end gets plowed late!
9. Cul-de-sacs (off Irwin Drive) push snow to the center of the turnarounds.
10. **Stockholm Street** – sand/salt.
11. **Countryside Village area.**
12. **Whitford Street** – Union to cul-de-sac.
- *13. **West Shore Ave.** – Crystal Lake area.
- *14. **Pond Drive.**
15. **Shaunna Court** (cul-de-sac)
16. **Columbia Road/Kings Court**
17. **King Street** (off Milford St.) Back in, back blade then plow out [*both sides!*]
18. **Martin Street** – Driveway past the corner, *must be plowed* with a pick-up after the main plow plows!
19. **Caron Street** (North of Queen City Ave.) *must be removed* to open two drives.
20. **Amherst Street** – Vicinity of #803 (dead-end east of Mammoth Road.)
21. **So. Gray Court** – Off dead-end of Fernand.

***NOTE:** ALL hills should be checked prior to the end of each shift!

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SIDEWALK TRACTORS

Route #1

Phase 1

START >> Valley & Maple Sts.

Northside of Valley Street to Elm Street
Elm St. – Valley to Auburn Street [**both** sides]
Auburn St. – Elm St. to Canal Street [**south** side]
Depot St. – Elm St. to Canal Street [**both** sides]
W. Central St. – Pleasant to Canal St. [**both** sides]
Pleasant St. – Elm St. to Canal Street
W. Merrimack St. – Elm St. to Canal Street
Middle St. – Elm to Canal Street [**both** sides]
Market St. – Elm to Canal Street [**both** sides]
Stark St. – Elm to Canal Street [**both** sides]
Mechanic St. – Elm to Canal Street [**both** sides]
Spring St. – Elm to Canal Street [**both** sides]
Bridge St. Bridge – RAMPS
Hollis St. – Elm to Canal Street [**both** sides]
Kidder St. – Elm to Canal Street [**both** sides]
Dow St. – Elm to Canal Street [**both** sides]
Fir St. – Elm to backstreet [**both** sides]
Langdon St. – Elm to Canal Street – **NORTH SIDE ONLY!!**
Brook St. – Elm to Canal Street [**both** sides]
Pennacook St. – Elm to Canal Street [**both** sides]
Canal St. – Bridge St. to Granite Street
Elm St. – Dow to Rowell St. [**West** side]
Elm St. – Dow to Bennington Road [**East** side]
Amoskeag Bridge – Elm to Front Street, **NORTH** side.
Front St. – **East** side to Dunbarton Road.
River Road – State Armory to Ready St., **East** side!
River Road – #96 to College (SNHU), **West** side!
Bennington Rd. – River Rd. to Elm Street [**South** side]
North Bay St. – Bennington Rd. to Madeline Rd. [**West** side]
Madeline Rd. – North Bay St. to Union Street [**North** side]
Campbell St. – Union St. to Hamel Drive [**South** side]
Webster St. – Elm St. to Oak Street [**both** sides]
W. Webster St. – Elm St. to River Road [**both** sides]
North Union St. – Webster to Clarke Street, **East** side.
North Union St. – Webster to Carpenter Street, **West** side.

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SIDEWALK TRACTORS

Route #1

Phase II

Valley St. – Maple to Mammoth Road [**North** side]
Valley St. – Belmont to Mammoth Road [**South** side]
Hayward St. – Taylor to Woodland [**North** side]
Taylor to Fremont [**South** side]
Taylor St. – Hayward to Somerville Street [**both** sides]
Taylor St. – Hayward to Valley Street [**EAST** side]
Merrill St. – Jewett St. to Woodman [**South** side]
Jewett St. – Valley to Massabesic Street [**EAST** side]
Cypress St. – Valley to Hayward Street [**both** sides]
Jewett St. – Valley to Somerville Street [**both** sides]
Jewett St. – Somerville to Weston Road [**East** side]
S. Jewett St. – Cilley Road to Weston Road [**West** side]
Cilley Rd. – Maple to Mammoth Rd., **SOUTH** side!
Porter St. – Cilley Road to Weston Road, **WEST** side
Somerville St. – Jewett to Wilson Street [**both** sides]
Wilson St. – Valley to Somerville Street [**both** sides]
Wilson St. – Somerville to Cilley Road, **EAST** side!
Hall St. – Somerville to Harvard Street [**both** sides]
Silver St. – Belmont to Lincoln Street [**both** sides]
Harvard St. – Belmont to Wilson Street [**both** sides]
Belmont St. – Somerville to Spruce Street [**both** sides]
Tarrytown Rd. – Lake Ave. to Massabesic Street [**East** side]
Candia Road – Mammoth Road to St. Pius Church, **SOUTH** side!
Candia Road – Mammoth Road to Norton Street, **NORTH** side.
Candia Road – Hanover to Massabesic Traffic Circle.
Mammoth Road – Candia Road to Cilley Road, **WEST** side!
Mammoth Road – Candia Road to 4 houses north [**East** side]
Mammoth Road – Candia Road to Bodwell Road, **EAST** side!
Hanover St. – Mammoth Road to I-93, **NORTH** side!
Hanover St. – I-93 to Candia Road, **SOUTH** side!
Hanover St. – Page St. to Woodland Ave., **SOUTH** side!
Weston Road – So. Willow to Huse Road, **North** side.
Huse Road – Weston Road to I-293 [**West** sides]
Huse Road – Mammoth Road to Claire St. [**East** side]
Huse Road – Hotel entrance to South Willow Street [**East** side]
Huse Road – Weston Road to Mammoth Road [**East** side]
Mooresville Road – Huse Road to So. Mammoth Road [**North** side]
Page St. – Hanover to Candia Road [**East** side]
Vinton St. – S. Jewett St. to opposite S. Cypress. **SOUTH** side **ONLY!**

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SIDEWALK TRACTORS

Route #2

Phase 1

START >> Auburn at Maple Street

Auburn St. – Maple to Elm Street [**both** sides]
Cedar St. – Maple to Elm Street [**both** sides]
Spruce St. – Maple to Elm Street [**both** sides]
Lake Ave. – Maple to Elm Street [**north** side]
Central St. – Maple to Elm Street [**both** sides]
Laurel St. – Maple to Pine Street [**both** sides]
Merrimack St. – Maple to Elm Street [**both** sides]
Manchester St. – Maple to Elm Street [**both** sides]
Hanover St. – Mammoth Road to Elm Street [**both** sides]
Amherst St. – Maple to Elm Street [**both** sides]
Concord St. – Maple to Elm Street [**both** sides]
Lowell St. – Maple to Elm Street [**both** sides]
High St. – Union to Chestnut Street [**both** sides]
Bridge St. – Mammoth Road to Elm Street [**both** sides]
Pearl St. – Maple to Elm Street also vicinity of 265 Pearl St. [**both** sides]
Orange St. – Maple to Elm Street [**both** sides]
Myrtle St. – Elm St. to Beech Street [**South** side]
Myrtle St. – Maple St. to Ash Street [**North** side]
Myrtle St. – Walnut St. to Elm Street [**North** side]
Prospect St. – Maple to Elm Street [**North** side]
Prospect St. – Maple to Ash Street [**South** side]
Prospect St. – Beech to Elm Street [**South** side]
Harrison St. – Maple to Elm Street [**both** sides]
Brook St. – Maple to Elm Street [**both** sides]
Blodget St. – Oak to Elm Street [**both** sides]
North side of Russell St. to Smyth Road.
Pennacook St. – Union St. to Elm St. [**both** sides]
Sagamore St. – Union St. to Elm Street [**both** sides]
Salmon St. – Maple St. to Elm Street [**both** sides]
North St. – Maple St. to Elm Street [**both** sides]
Smyth Road – Blodget to Kennard Road, **South** side
Bruce Road – **EAST** side, Smyth Road School
Kennard Road – Smyth Road to Mammoth Road [**south** side]
Mammoth Road – Bridge St. to Kennard Road [**East** side]
Derryfield Court – [**East** side]

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SIDEWALK TRACTORS

Route #2

Phase II

START >> Auburn at Maple St.

Auburn St. – Maple Street to Lincoln Street [**both** sides]
Lincoln Street to Wilson Street [**North** side]
Wilson Street to Belmont Street [**both** sides]
Cedar St. – Maple Street to Lincoln Street [**both** sides]
Lincoln Street to Wilson Street [**South** side]
Wilson Street to Hall Street [**both** sides]
Spruce St. – Maple Street to Belmont Street [**both** sides]
Lake Ave. – Maple Street to Beacon Street [**both** sides]
Maple Street to Beacon Street [**South** side]
Central St. – Maple Street to Hall Street [**both** sides]
Laurel St. – Maple Street to Hall Street [**both** sides]
Merrimack St. – Maple Street to Hall Street [**both** sides]
Manchester St. – Maple Street to Hall Street [**both** sides]
Wilson St. – Valley Street to Hanover Street [**both** sides]
Amherst St. – Maple Street to Ashland Street [**both** sides]
Concord St. – Maple Street to Ashland Street [**both** sides]
Lowell St. – Maple Street to Weston Street [**both** sides]
Weston Street to Highland Street [**North** side]
East High St. – Maple Street to Ashland Street [**both** sides]
Ashland Street to Buzzell Street [**South** side]
Buzzell Street to Weston Street [**both** sides]
Weston to Highland Street [**SOUTH** side]
Highland St. – Lowell Street to Bridge St. [**WEST** side]
Reservoir Ave. – Bridge St. to Hillside Jr. HS [**North** side]
Pearl St. – Maple to Morrison Street [**both** sides]
Hall St. – Pearl St. to Bridge St. [**both** sides]
Wellington Road – Mammoth Road to Hs. #875 [**SOUTH** side]
Derryfield Court – Mammoth Road to Mammoth Road [**Loop**]
Eastern Ave. – Wellington Road to top of hill [**West** side]
Edw. J. Roy Drive – Wellington to cul-de-sac [**East** side]
Mammoth Road – Bridge St. to Tarrytown Road [**West** side]
Ashland St. – Hanover to Bridge Street [**both** sides]
Lincoln St. – Hayward Street to Amherst Street [**both** sides]

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SIDEWALK TRACTORS

Route #3

Phase 1

START >> Auburn St. at Chestnut St.

Chestnut St. – Auburn St. to Webster St. [**both** sides]
Pine St. – Valley St. to Webster St. [**both** sides]
Union St. – Valley St. to Webster St. [**both** sides]
Beech St. – Valley St. to Webster St. [**both** sides]
Maple St. – Valley St. to Webster St. [**both** sides]
Ash St. – Lowell St. to North St. [**both** sides]
Ash St. – North St. to Webster St. **East** side.
Walnut St. – Lowell St. to Webster St. [**both** sides]

Phase II

Green St. – Beech St. to Pine St. [**both** sides]
Grove St. – Beech St. to Pine St. [**both** sides]
Bell St. – Beech St. to Pine St. [**both** sides]
Union St. – Valley St. to Somerville St. [**both** sides]
Beech St. – Valley St. to Somerville St. [**both** sides]
Maple St. – Valley St. to Cilley Road [**both** sides]
So. Willow St. – (**when possible**) Cilley Rd. to Harvey Rd., [**both** sides]

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SIDEWALK TRACTORS

Route #4

Phase 1

START >>

Valley Street at Elm Street
Elm St. – Valley Street to Baker Street [**both** sides]
Queen City Ave. – Elm to Second Street [**North** side]
Elm to **2nd driveway** [**South** side]
Brown Ave. – Elm to Queen City Avenue [**both** sides]
Queen City Ave. to O'Malley Street [**East** side]
W. Hancock St. – Second St. to South Main [**North** side]
Woodbury Ave. - Second St. to South Main [**both** sides]
Boynton St. – South Main to Allen Street [**West** side]
Allen St. to Almond Street [**East** side]
Allen St. – S. Main to James Pollock Drive [**North** side]
James Pollock Dr. – Allen St. to School [**East** side]
Summerside Ave. – Milford to School [**West** side]
Milford St. – South Main to Sylvester Street [**both** sides]
Sylvester St. – Milford to Varney Street [**West** side]
Rockland Ave. – Varney to Wilkins Street [**East** side]
Donald St. – Milford Street to Bedford line [**South** side]
South Main St. – Bedford line to McGregor Square [**both** sides]
Harvell St. – So. Main to Second St. [**both** sides]
Varney St. – South Main to Mast Road [**both** sides]
Mast Road – Varney to Wilkins Street [**both** sides]
Varney to Theophile St. [**East** side]
Blaine St. – Main to Second Street [**both** sides]
Cleveland St. – Second St. easterly [**South** side]
Granite St. – Granite Square to Elm Street [**both** sides]
Walker St. – South Main to Second Street [**North** side]
Ferry St. – South Main to Fourth Street [**both** sides]
Fourth Street to Second Street [**South** side]
School St. – South Main to Second Street [**both** sides]
Third St. – School to Ferry Street [**East** side]
Ferry to Walker Street [**both** sides]
Douglas St. – Main to West Street [**both** sides]
Douglas St. – North side to Allard Drive
Allard Dr. – West side to Foundry Street
Conant St. – Main to Blucher Street [**both** sides]
Blucher St. – Conant to Parkside [**East** side]
Parkside Ave. – In front of School [**East** side]
Putnam St. – Main to Dubuque Street [**both** sides]
Dubuque to Blucher Street [**South** side]
Blucher to Cumberland Street [**both** sides]
Notre Dame Ave. – Conant to Putnam Street [**both** sides]
Putnam to Amory Street [**West** side]
Amory to Kelley Street [**both** sides]
Hecker St. – Main to Notre Dame Avenue [**North** side]
Wayne St. – Cartier to Auclair [**both** sides]
Cartier St. – Wayne to Sullivan Street [**both** sides]
Amory St. – McGregor to Kimball Street [**both** sides]
Kelley St. – Notre Dame Ave. to St. Edmond's Church [**both** sides]

SIDEWALK TRACTORS

Route #4

Phase 1 – (Cont'd.)

Bremer St. – Coolidge Ave. to Laval W. Back [**North** side]
- Coolidge Ave. to Moore [**South** side]
Coolidge Ave. – Kelley St. to Dexter [**West** side]
Mason St. – Rimmon St. to Laval St. [**South** side]
Mason St. – Top of hill to Parking lot [**North** side]
Cartier St. – Amory St. to Bremer Street [**both** sides]
Dubuque St. – Putnam St. to Bremer Street [**both** sides]
Rimmon St. – Wayne St. to Bremer Street [**both** sides]
Hevey St. – Wayne St. to Bremer Street [**East** side]
Hevey St. – Amory to Bremer Street [**West** side]
Bartlett St. – Amory St. to Putnam Street [**East** side]
Montgomery St. – Amory St. to #634 [**both** sides]
- Bremer St. to Mason Street [**both** sides]
Reed St. – Amory St. to Kelley Street [**both** sides]
Youville St. – Kelley St. to Bremer St. [**both** sides]
Alsace St. – Amory St. to Bremer St. [**both** sides]
Bremer St. to Mason St. [**West** side]
Joliette St. – Amory St. to Mason Street [**East** side]
Joliette St. – Amory St. to Bremer Street [**West** side]
Laval St. – Amory St. to Bremer Street [**both** sides]
Bremer St. – Upland St. to West Side Arena [**South** side]
Notre Dame Bridge – McGregor Square to Elm Street [**both** sides]
Second St. – W.Hancock St. to Granite Street [**both** sides]

Revised – 11/08

SIDEWALK TRACTORS

Route #4

Phase II

Baker St. – Elm St. to Calef Road [**both** sides]
W. Baker St. – to Trahan St. [**both** sides]
Calef Road – Baker St. to Rosemont [**West** side]
Calef Road – W. Mitchell to Crescent Rd. [**West** side]
Mitchell St. – Calef Road to South Beech Street [**North** side]
So. Beech St. – Armand St. to Gold Street [**West** side]
So. Beech St. – Mitchell St. to Spring Garden Street [**East** side]
Brown Ave. – I-293 to Airport entrance [**both** sides]
Connecting Rd. – Brown Ave. to Kenburma [**North** side]
Pepperidge Dr. – Brown Ave. to top of hill [**West** side]
Goffs Falls Rd. – Post Office to Brown Ave. [**West** side]
Jeffrey St. – Goffs Falls Road to Brown Avenue

Revised – 11/08

* * * * * * * * * * *	SNOW/STORM SHIFT CHANGE PROCEDURES	* * * * * * * * * * *
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1. CALL – IN Chief or Asst. Chief of Street Operations and pass on following information.

2. ON-GOING OPERATION Nature of the operation; define what men and equipment are continuing and what time they may be leaving.

3. PERSONNEL Provide to potential staff resources – list of personnel who *were not* called, who did not answer the phone or who were not home at the time.

4. CHECK ROUTES For remaining work before personnel leave and check critical areas for flooding during a rain changeover situation to determine the need to open and/or clean catch basins.

5. CHECK **Condition of sidewalks** – around schools and Elm Street. If in a plowing operation, sidewalk care should be automatic.

6. CALL-IN Switchboard Operator.

Revised – 11/08

TO: SNOW EMERGENCY SUPERVISOR

FROM: Lt. Jon Hopkins

REFERENCE: **SNOW EMERGENCY ROLL CALL**

1. The Snow Emergency Supervisor will hold roll call for all officers working the Snow Emergency prior to the detail starting.
2. A Police Officer will be with every vehicle when it is being hooked up by a wrecker.
3. All Police vehicles will have the blue lights activated during the tow process.
4. Prior to a vehicle being hooked up to a wrecker, every reasonable effort will be made to contact the owner. (Blue lights, spot light, a short activation of the siren.)
5. In the event of a vehicle owner coming out after a vehicle has been picked up by a wrecker, the vehicle will be dropped. The officer will sign the tow slip so the wrecker driver will receive his \$20.00 drop fee. **At no time will a vehicle be towed if it can be moved.** If two vehicles must be dropped to release a vehicle, the two drop fees will be awarded to the tow company.
6. Tow Company will be instructed to stop connecting a vehicle in the event a responsible party comes out to move the vehicle.
7. All vehicles that are dropped will be given a "Snow Emergency" parking ticket.
8. Officers will watch for vehicles being towed in a manner that may cause damage and report it to the Snow Emergency Supervisor.
9. Officers will make sure that tow companies abide by local, state and federal laws.
 - The primary function of the Snow Emergency is not to tow as many cars as possible, but to get the cars off the street so that the streets can be plowed.
 - If you have any questions about this matter, please feel free to contact me.

Revised – 11/08

SNOW FIGHTING EQUIPMENT

Summary

08/'09 Season

TOTALS

28 -- Large trucks

- (6) Double wings
- (18) Single wings
- (4) Single plows
- (28) Salters – (24) Stainless Steel w/Liquid Calcium

9 -- Loaders

- (8) w/Plows & Wings
- (1) for loading salt and sand

3 -- Graders

40 Pieces of *Heavy* Equipment

7 -- Small Trucks (No salter on #550)

(6) One ton trucks

47 Pieces of *Plowing* Equipment

9 Pieces of *Sidewalk* Equipment

56 Pieces of Snow Fighting Equipment

2 Large Snowblowers for Snow Removal

*** A total of 57 pieces of Snow Fighting/Removal Equipment**

Revised 11/'08

SNOW FIGHTING EQUIPMENT

'08/'09 Season

TRUCKS

(4) Ten Wheelers

- 4 Single wing
- 4 With salters
- 4 w/Liquid Calcium

(24) Six Wheelers

- 6 Double wings
- 6 With salters
- 6 w/Liquid Calcium

- 14 Single wings
- 14 With salters
- 14 w/Liquid Calcium

- 4 Single Plow ONLY
- 4 with Salters
- 4 w/Liquid Calcium

28 Trucks

- 6 Double wings
- 18 Single wings
- (28) Salters
- (28) Salters w/Liquid Calcium

- 4 Single Plows

Revised 11/'08

SNOW FIGHTING EQUIPMENT

'08/'09 Season

HEAVY Equipment

- 9 -- Loaders
 - (8) Loaders w/plows & wings
 - (1) Remains in City Yard
- 3 -- Graders
- 12 Heavy equipment

40 Pieces of Heavy Equipment

Small Trucks

- (6) 1-ton trucks w/plows & salters
- (1) $\frac{3}{4}$ ton truck w/plow ONLY

7 Small trucks

SIDEWALK EQUIPMENT

- (4) Bombadiers w/sanders
- (4) Trackless w/snowblower & sander (have plow)
- (1) Sidewalk Trackless has rubber edges
- (1) Old sidewalk tractor (held in reserve)

9 Pieces of Sidewalk Equipment

SNOW REMOVAL

- (2) Large Snowblowers

Revised – 11/'08

SNOW RELATED AREAS OF CONCERN

Procedure

SNOW EMERGENCIES: Should be called based on the forecast and not after the fact. (Much easier to cancel than to implement.) *This will help with a high positive profile and should help curb-to-curb plowing as well as giving adequate time to implement.*

Switchboard: Tracy or Caroline or whomever should be contacted prior to 6:00 to come in at 6:30 or 7:00 AM the morning after the storm, even if the storm is still in progress to assist in addressing complaints – this should be automatic, but if they are not sure, they should check with Bob Roy or whomever.

Shift Change: Truck drivers should stay out until 9:00 AM or be replaced prior to 6:00 AM. Scavenger drivers who are plowing at night should be replaced by 6:00 AM if they are scheduled for a full days' work. Trucks which are salting should have a "sizable load" on by 5:00 AM – this will help in having the entire fleet on the road by "rush hour" ensuring the high visibility profile and improve the Department's image.

Complaint Procedure:

- Complaints were handled in two separate and distinct ways – the established way should be: **(1)** calls from the switchboard to the person on a terminal who will log the call in by time, street, location and nature of complaint. **(2)** A copy of the complaints are then passed on to the "Operations Room" for attention. Another copy will be given to Marty Miccio or another designated engineering staff person to enter into the computer and follow-up with a map and graph.
- Planning for the entire storm – before, during and after the storm.
- Establish good media relations! (To the Department's advantage.)
- Keep Kevin Padden informed as to type of snow, duration of storm, type and accumulation of snow expected – same procedure for ice conditions.
- "Second Shift" arrange to have as many trucks on the road as possible – addressing complaints in their routes, planning for this procedure *should occur prior to end of the main operation*.

OPERATIONS:

- Radios – Adequate number of portable radios.
- Ice Ruts – Should be cut **A.S.A.P.** to facilitate next plowing operation especially at intersections.
- Snow Removal from Elm Street and other affected streets
 - 1- Evaluate condition and estimate “pushing” time.
 - 2- Shut down Elm St. during cutting/pushing operations.
 - 3- Allow adequate time for removal.
 - 4- Push a little further westerly – using lane lines as a guide, allow room at “nubbins” for trucks.
 - 5- Notify media of closure.
 - 6- Work with local establishments.
 - 7- Place electronic message boards @ appropriate locations.
- Coordinate Time with Private Trucks

When used for snow hauling, private trucks should be told to begin ½ hour later than our men. In this manner, all should arrive on the site at the same time and no one hanging around waiting for the other to arrive. (Dept. begins at 7:30 AM – private trucks should start at 8:00 AM.)
- Wing Person – should be advised that they are responsible for pushing snow as far back as possible, especially **slush**. They are the “eyes of the driver” and that the Zone Supervisor should be able to see the curb when he checks the route.
- Some sidewalk areas can be plowed with wings.
- Shuttle Bus Service – Complete parking ban on Elm Street. (MTA letter of 2/14/94 attached.)

Revised – 11/08

MANCHESTER POLICE DEPARTMENT

Traffic Division Directive

Towing Of Cars During Snow Emergencies

Purpose: To clarify the method used when cars are towed during Snow Removal.

Policy: The following will be the procedure taking effect *immediately* for the towing of cars during Snow Removal Emergencies.

- ALL tow trucks will report to the Impoundment Area and be dispatched from there. (They were formerly dispatched from the Highway Department.)
- The Director of Public Works will declare the Snow Emergency, will assure that public notice is given, and will set the time that removal operations will begin.
- One officer will be assigned to the Highway Department Dispatch Office where he will maintain a record of all towed vehicles listing them all under one case number.
- The wrecker operators will hire two Security Guards or other suitable persons. One will be assigned to the Highway Department Dispatch Office, where he will dispatch the tow trucks with walkie-talkies supplied by each of the towing companies (7 unless conditions warrant additional). The officer assigned to the Highway Department Dispatch Office, will work in conjunction with the Security Guard to keep a record of which tow truck towed what car.
- The second Security Guard, will be at the Impoundment Area and will accept payment from car owners as they claim their vehicles. A Police radio will be assigned to the Security Guard at the Impoundment Area.
- One Officer will be assigned to the Superintendent of Highways. One Officer will be assigned to the Impoundment area, (but *will not* accept money, only the Security Guard will accept money.) The Officer at the Impoundment Area will be there to prevent trouble when irate owners show up to claim their vehicles. This officer can be removed at the OIC's discretion.
- NO Officer will be assigned to the Parking Lot Detail. The Traffic Department Supervisor in charge of clearing numicipal parking lots will call in cars to be towed directly to the Highway Department where the Officer and Security Guard at that location, will dispatch a tow truck to the parking lot.
- Officers will no longer get involved in seeing that each tow company gets an approximate equal share of towed vehicles. This will be the Security Guard's responsibility.
- The Officers required for the Snow Emergency detail, will be taken from the "On Duty" Roster.

Lt. Mike Tessier

Per: Chief Mark Driscoll

(12/02)

DOWNTOWN SNOW REMOVAL

Add to list of equipment:

Snow melter:

Operator – Bob Brule

Assistant – Ron Gagnon

Loader Operator

Note: The snow melter can operate for approximately 8 hours.
At that time the melter would need to be refueled and the sump cleaned out.
A sewer inductor and operator would be called in to assist in cleaning the
hopper.

Note: The Buyer will have a fuel supplier on notice for refueling.